LAND APPLICATION SITE ROBERT T. MAASS DWRTM 1 DINWIDDIE COUNTY

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APF	LICATION AGREEMEN	T - BIOSOLIDS AND IN	DUSTRIAL RESIDUALS
remains in effect until it is to the Landowner in the even individual parcels identified	of a sale of one or more pa	er party or, with respect to tarcels, until ownership of al , those parcels for which ov	hose parcels that are retained by I parcels changes. If ownership of wnership has changed will no
Landowner: The Landowner is the owner the agricultural, silvicultural attached as Exhibit A.	er of record of the real prope or reclamation sites identifi	erty located in <u>Drwwd</u> ied below in Table 1 and id	virginia, which includes entified on the tax map(s)
Table 1.: Parcels au	thorized to receive biosolids	, water treatment residuals	or other industrial sludges
Tax Parcel ID	Tax Parcel ID	<u>Tax Parcel ID</u>	Tax Parcel ID
91-2			
91-16A			
91-7A			
☐ Additional parcels containing Lar			
Check one:	e Landowner is the sole ow e Landowner is one of mult	ner of the properties identi iple owners of the propertion	fied herein. es identified herein.
within 38 months of the late 1. Notify the purchase later than the date 2. Notify the Permitte	est date of biosolids applica er or transferee of the applic of the property transfer; and e of the sale within two wee	tion, the Landowner shall: cable public access and cro d eks following property trans	
notify the Permittee immed	er agreements for land app iately if conditions change s of this agreement becomes	such that the fields are no l	ied herein. The Landowner will onger available to the Permittee erein contained becomes
agricultural sites identified inspections on the land ide	ants permission to the Perm above and in Exhibit A. The ntified above, before, during mpliance with regulatory req	e Landowner also grants po g or after land application c	ermission for DEQ staff to conduct f permitted residuals for the
Class B biosolids Wat ☑ Yes ☐ No ☑ Y	er treatment residuals	Food processing waste ⊠ Yes □ No	Other industrial sludges ☑ Yes ☐ No
Robert Maass Landowner - Printed Name, Tit	e Signature	11012 cut hav	Mailing Address & Phone Number
D		804-	-731-4703
manner authorized by the VP	A Permit Regulation and in am	osolids and/or industrial residu	als on the Landowner's land in the identified in the nutrient management 1-104.2 of the Code of Virginia.
The Permittee agrees to notify	the Landowner or the Landov	wner's designee of the propos	ed schedule for land application and ethe source of residuals to be applied.
□ I reviewed the document(s		to the person signing for land	owner above. I will make a copy of this
Permittee – Authorized Represe	entative Signature	PO Box 562	Remington, Virginia 22734 Mailing Address
Printed Nam			

Page 1 of 2

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permi	ittee:Recyc Systems, Inc	County or City: Dinwidhe
ando	owner: Robert Magss	
.and	lowner Site Management Requirements:	
	_andowner, I have received a DEQ Biosolids Fact Sheation of biosolids, the components of biosolids and pr	eet that includes information regarding regulations governing the land roper handling and land application of biosolids.
dentifi	also been expressly advised by the Permittee that the ded below must be complied with after biosolids have am responsible for the implementation of these practice.	ne site management requirements and site access restrictions been applied on my property in order to protect public health, and ces.
	e to implement the following site management practic ds at the site:	es at each site under my ownership following the land application of
1.	Notification Signs: I will not remove any signs posted	d by the Permittee for the purpose of identifying my field as a he Permittee, until at least 30 days after land application at that site is
2.	Public Access	
	any application of biosolids.	or public exposure shall be restricted for at least one year following
	application of biosolids. No biosolids amen- same period of time unless adequate provis c. Turf grown on land where biosolids are app	or public exposure shall be restricted for at least 30 days following any ided soil shall be excavated or removed from the site during this sions are made to prevent public exposure to soil, dusts or aerosols; slied shall not be harvested for one year after application of biosolids land with a high potential for public exposure or a lawn, unless
3.	Crop Restrictions:	the biosolids/soil mixture and are totally above the land surface shall
	not be harvested for 14 months after the ap b. Food crops with harvested parts below the	oplication of biosolids. surface of the land shall not be harvested for 20 months after the remain on the land surface for a time period of four (4) or more
		surface of the land shall not be harvested for 38 months when the me period of less than four (4) months prior to incorporation.
	d. Other food crops and fiber crops shall not b	be harvested for 30 days after the application of biosolids; asys after the application of biosolids (60 days if fed to lactating dairy
4.	Livestock Access Restrictions: Following biosolids application to pasture or hay	yland sites:
	a. Meat producing livestock shall not be grazed b. Lactating dairy animals shall not be grazed c. Other animals shall be restricted from grazi	ed for 30 days, for a minimum of 60 days.
	Supplemental commercial fertilizer or manure applications	ations will be coordinated with the biosolids and industrial residuals nts are not exceeded as identified in the nutrient management plan
	Tobacco, because it has been shown to accumulate years following the application of biosolids or industripounds/acre (0.5 kilograms/hectare).	cadmium, should not be grown on the Landowner's land for three rial residuals which bear cadmium equal to or exceeding 0.45
	Med Me	4-5-15
	Landowner's Signature	Date
	May Al Robert Mags	S 11012 outbank Church Rd Mckenney Mailing Address & Phone Number
	Farm Operator Signature	
		804-731-4703

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-VI: LAND APPL	ICATION AGREEMENT - B	IOSOLIDS AND IND	DUSTRIAL RESIDUALS
until it is terminated in writing the event of a sale of one or identified in this agreement of	nore parcels, until ownership of	ere as the "Permittee", to those parcels that a fall parcels changes.	referred to This agreement remains in effeare retained by the Landowner in If ownership of individual parcels and will no longer be authorized to
Landowner: The Landowner is the owner	of record of the real property loc clamation sites identified below	catad in Discool did	ie. Virginia, which includes the ed on the tax map(s) with county
Table 1.: Parcels auth	norized to receive biosolids, wat	er treatment residuals	or other industrial sludges
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
91-16A	360		1 4 7 4 4 4 4
91-7A	Likewan kang man bang palengan n	and the second second second	N. P. C.
			an muli gar salagitan iki ili ili ili ili ili ili ili ili ili
t the section of the		The second section is	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
☐ Additional parcels containing	Land Application Sites are identified on	Supplement A (check if app	plicable)
In the event that the Landown within 38 months of the latest 1. Notify the purchaser of than the date of the position 2. Notify the Permittee of the Landowner has no other anotify the Permittee immediate application or any part of this application or any part of this agricultural sites identified about the land identification on the land identification or the land identification of determining complements agricultural sites identified about the land identification of the land	f the sale within two weeks follo	f the property to which a Landowner shall: ublic access and crop wing property transfer on the fields are no long to information herein cland apply residuals as owner also grants permer land application of permet applicable to such possing waste	biosolids have been applied management restrictions no later herein. The Landowner will ger available to the Permittee for contained becomes incorrect.
Printed name James E. Maass By: Title*	Mailing Address 2704 Robson of Hennio, VA Z Phone No. 804-69	3233 1-7478	downer Signature
* I certify that I am a responsible	sign for the landowner as indicated by	my title as executor, Trust	ee or Power of attorney, etc.
proprietorship, LLC, municipality, st	official [or officer] authorized to act or act or federal agency, etc.	n penalt of the following co	rporation, partnership,
Permittee:			

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

Printed name	Susan Trumbo	Mailing Address PO Box 562, Remington Virginia 22734	Permittee- Authorized Representative
Title	Technical Manager	Phone No. 540-547-3300	The state of the s

_				9	
	mittee: _	3	Systems, Inc	County or City: _	Dinwiddie
Lan	idowner: _	James	Maass	_	
Lan	downer S	ite Managem	ent Requirements:		
	The state of the s		a components of blosofid	and brober nandling and	nation regarding regulations governing the diand application of biosolids.
i hav	e also beer lified below	expressly adv	ised by the Permittee tha	t the site management receive been applied as my	quirements and site access restrictions operty in order to protect public health, and
I agre	ee to implen osolids at th	nent the followi	ng site management prac	ctices at each site under n	ny ownership following the land application
1.	Notificatio biosolids I site Is con	Title abbuilding	not remove any signs pos n site, unless requested b	sted by the Permittee for t y the Permittee, until at le	he purpose of identifying my field as a ast 30 days after land application at that
2.	b. F a th a c. T	Public access to collowing any application in same period erosols; urf grown on la collosolids when to collowing the collosolids when the collosolid when the collosolids when the collosolid when the collosolida when the	pland with a low potential of biosolids. No biosolids are adequate to time unless adequate and where biosolids are a	for public exposure shall amended soil shall be ex provisions are made to p	I be restricted for at least one year be restricted for at least 30 days following cavated or removed from the site during revent public exposure to soil, dusts or ted for one year after application of the potential for public exposure or a lawn,
3.	Crop Restr a. For b. For ap m. c. For bi d. Of e. For da	rictions: cood crops with cood crops with cool crops with cool crops with cood crops with cood crops with cool crops with cool crops with cool crops shall cool crops shall cool crops animals)	harvested parts that touc ested for 14 months after harvested parts below the psolids when the biosolids accorporation into the soil, harvested parts below the on the land surface for a and fiber crops shall not not be harvested for 30 c	e surface of the land shall s remain on the land surface of the land shall time period of less than for be harvested for 30 days days after the application of	not be harvested for 20 months after the ce for a time period of four (4) or more not be harvested for 38 months when the pur (4) months prior to incorporation. after the application of biosolids, of biosolids, (60 days if fod to legisting
4.	Follow a. Me b. La	eat producing li ctating dairy a	ions: oplication to pasture or ha ivestock shall not be graz	ayland sites: ted for 30 days, d for a minimum of 60 days	
					d with the biosolids and industrial edded as identified in the nutrient 104.2 of the Code of Virginia;
6.	Tobacco, be years follow	ecause it has b	een shown to accumulate	a cadmium, abauld Li	grown on the Landowner's land for three cadmium equal to or exceeding 0.45
,	M				10
	Landowne	r's Signature			12-10-17
		. o orginature		Cutbank Chun	Date
)	N			
./1	12 A	1		iney.VA 23872	12 10 10
1	W/		8027-13	1-4703	1)-10-17

mailing address & phone

Operator's Signature

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee:

Recyc Systems, Inc

Site Name:

Robert T. Maass

County or City:

Dinwiddie County

Please Print

Signature not required on this page

Tax Parcel ID(s)	Landowners (s)
91-16A	James E. Maass and Robert T. Maass
91-7A	James E. Maass and Robert T. Maass

FARM DATA SHEET

SITE NAME:	Robert T. Maass	COUNTY:	Dinwiddie
OWNER:	James E. Maass and Robert T. Maass	OPERATOR:	Robert T. Maass
OWNER'S	See List Below	OPERATOR'S	11012 Cutbank Church Rd.
ADDRESS:		ADDRESS:	McKenney, VA 23872
OWNER'S TELEPHONE:	See List Below	OPERATOR'S TELEPHONE:	804-731-4703
GENERAL FARM TYPE:	Pasture	CELL PHONE:	-
# CATTLE:	30	EMAIL:	-
LAGOON or SLURRY:	None	LATITUDE:	36.940
TOPO QUAD:	McKenney	LONGITUDE:	-77.706
COMMENTS:		METHOD OF DETERMINATION:	Online Maps
11012 Cutba McKenne	T. Maass ank Church Rd. y, VA 23872 31-4703	James E. M 2704 Robs Henrico, VA 804-691-2	on Ct. 23233
			ВВ

FIELD CHANGES ROBERT T. MAASS DINWIDDIE COUNTY

OLD FIELDS 1 AND 2 ARE NOW COMBINED INTO 1 FIELD.

RECYC SYSTEMS, INC FIELD DATA SHEET

Field	DEQ	Gross	Environr	nentally S	ensitive	Soils		Tax	FSA
				Bed Rock/	Surf/		Hydro		
Identification	Control ID	Acres	Water Table	Shallow	Leach	Freq Flood	Мар	Мар#	Tract #
									T 5233
								91-16A	F 2, 3, 5,
DWRTM 1	51053-00327-0000	26.1	-	-	-	-	CU 13	91-7A	6, 7, 8
									_
								×	
-									
									1
TOTAL ACRES IN									
SITE		26.1							

Page 1 of 2

Report Number: 17-172-0505

Send To: Recyc Systems Inc Susan Trumbo

8455 Whiteshop Road

Culpepper VA 22701

Account Number: 70594



7621 Whitepine Road, Richmond, VA 23237 Main 804-743-9401 ° Fax 804-271-6446 www.waypointanalytical.com

"Every acre...Every year."™

Grower: Robert T Maass Dinwiddie

SOIL ANALYSIS REPORT

Analytical Method(s):

SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 06/21/2017

Date Of Analysis: 06/22/2017

Date Of Report: 06/23/2017

		OM	W/V	ENR	North Callet	Phosphorus		Potassium	Magnesium	Calcium	Sodium	p	H	Acidity	C.E.C
Sample ID Field ID	Lab Number	% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
DWRTM-/	06368	1.3 L		72	21 L			40 VL	65 H	422 H		6.8		0.1	2.9
DWRTM-2	06369	2.2		88	23 L			41 L	123 H	597 M		6.6	6.90	0.3	4.4

	Percent Base Saturation				Nitrate	Sulfur	Zin	С	Manga	nese	Iron	Copper	Boron	Soluble Salts		
Sample ID Field ID	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm	1 2 2	Mı ppm	n Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	
DWRTM-1	3.5	18.7	72.8		3.4			2.0	L	32	Н					
DWRTM-2	2.4	23.3	67.8		6.8			3.6	Н	24	Н					

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

Pauric McGroary

Page 2 of 2

Report Number: 17-172-0505

Account Number: 70594

Waypoint was an alytical

7621 Whitepine Road, Richmond, VA 23237 Main 804-743-9401 ° Fax 804-271-6446 www.waypointanalytical.com

"Every acre...Every year."™

Grower: Robert T Maass Dinwiddie

Susan Trumbo 8455 Whiteshop Road Culpepper VA 22701

Send To: Recyc Systems Inc

Date Received: 06/21/2017

Date Of Report: 06/23/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N Ib/A	Phosphate P ₂ O ₅ Ib/A	Potash K₂O Ib/A	Magnesium Mg Ib/A	Sulfur S Ib/A	Zinc Zn Ib/A	Manganese Mn Ib/A	Iron Fe Ib/A	Copper Cu Ib/A	Boron B Ib/A
DWRTM-#	Adjust pH to 6.8	0	0.0				0			0			
DWRTM-2	Adjust pH to 6.8	0	1.0		3		0			0			

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric Mc George

Pauric McGroary

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet (Spring, 2020-Summer, 2022) Robert T. Maass Planner: John Doe

Tract: 5233

Location: Dinwiddie

(N = N based, 1P = I	based,	1.5P =	P based at 1.5 rem	oval, uP = No P	allowed)								
Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (Ibs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (Ibs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
2, 3, 5, 6, 7, 8/DWRTM 1(N)	26/26	2020	Grass Pasture	50-80-80	0/0				50-80-80	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K20	Lab	Soil pH	rec. lime tons/Ac
5233	DWRTM 1	26	[No Test]					

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
5233	5233/2, 3, 5	DWRTM 1	26	Cecil	IVa	П	III	II .	

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
Ī	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan:

New Plan

Spring, 2020 - Summer, 2022

Farm Name:

Robert T. Maass

Location: Specialist: Dinwiddie John Doe

N-based Acres: 26.1 P-based Acres: 0.0

Tract Name:

5233

FSA Number: 5233

Location:

Dinwiddie

Field Name:

DWRTM 1

Total Acres:

26.10 Usable Acres: 26.10

FSA Number: 2, 3, 5, 6, 7, 8

.....

Tract:

5233

В

Location:

Dinwiddie

Slope Class:

Hydrologic Group:

В

Riparian buffer width: 0 ft Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE

PH P

K

Lab

[NO TEST]

Soils:

PERCENT

SYMBOL

SOIL SERIES

9 2C Appling 91 4B Cecil

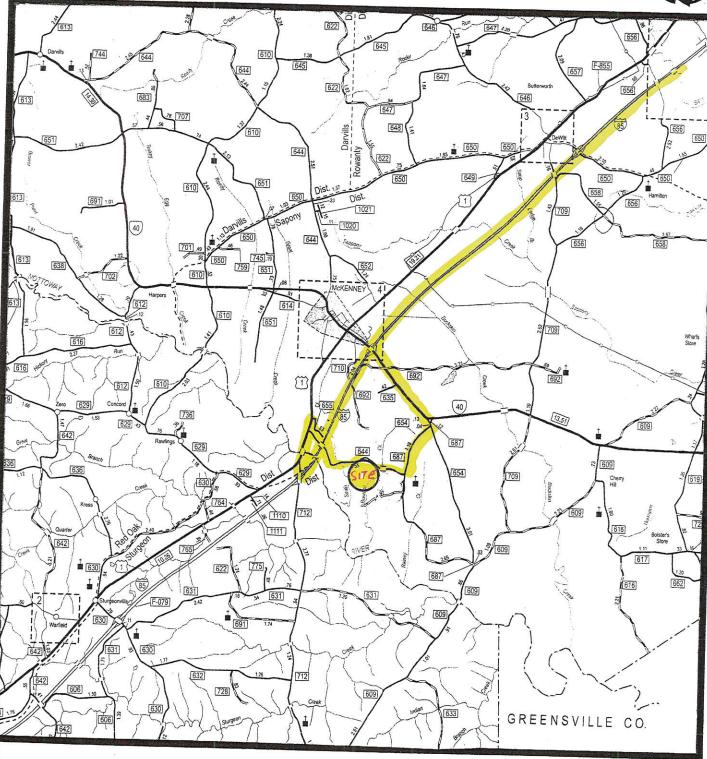
Field Warnings:

MAPS

Recyc Systems.

(Biosolids Land Application)





Scale:

1 inch = 2 miles

DWRTM 1

12-18-19

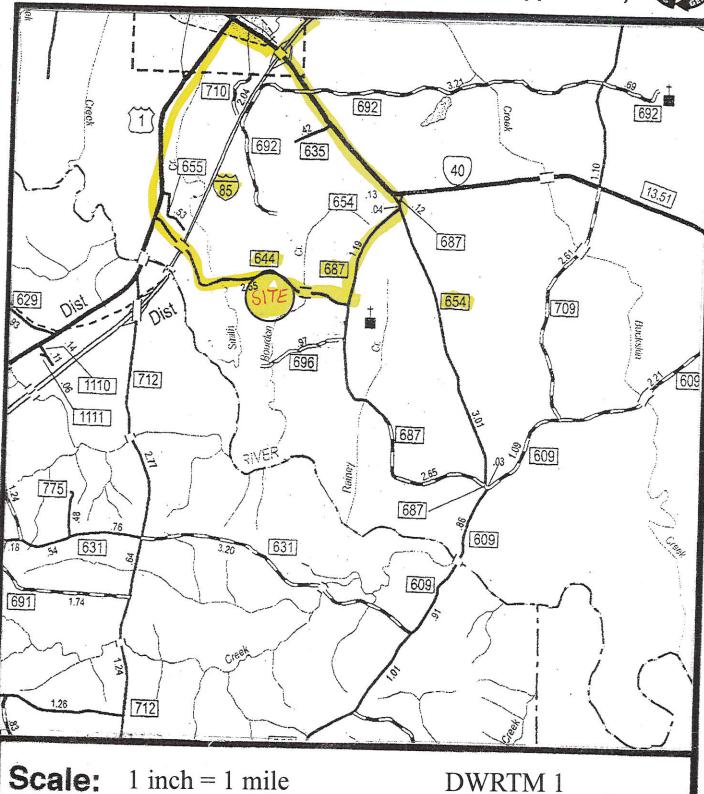
Truck Route marked in Yellow

VICINITY MAP

Recyc Systems.

(Biosolids Land Application)



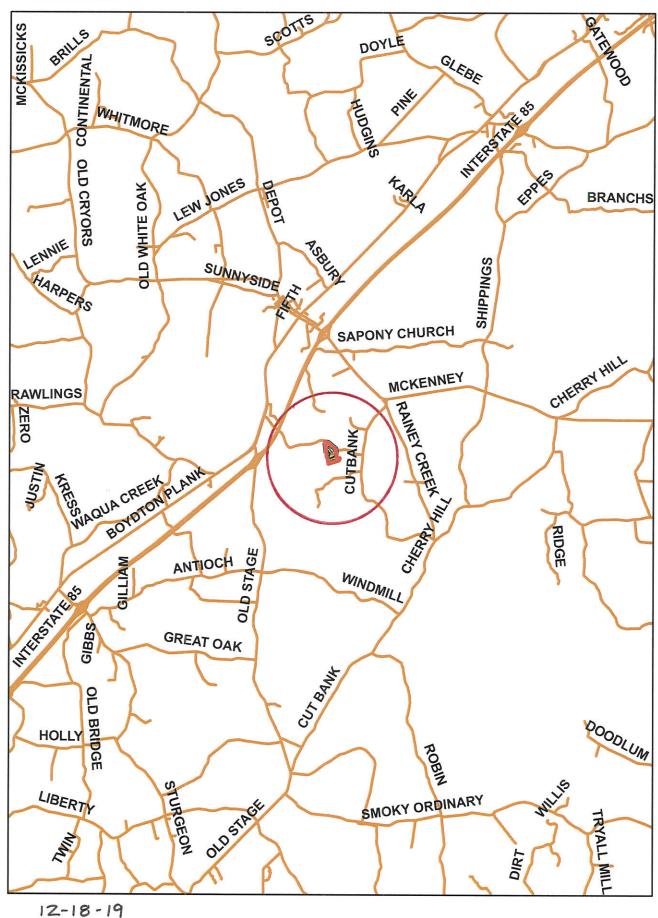


12-18-19

VICINITY MAP

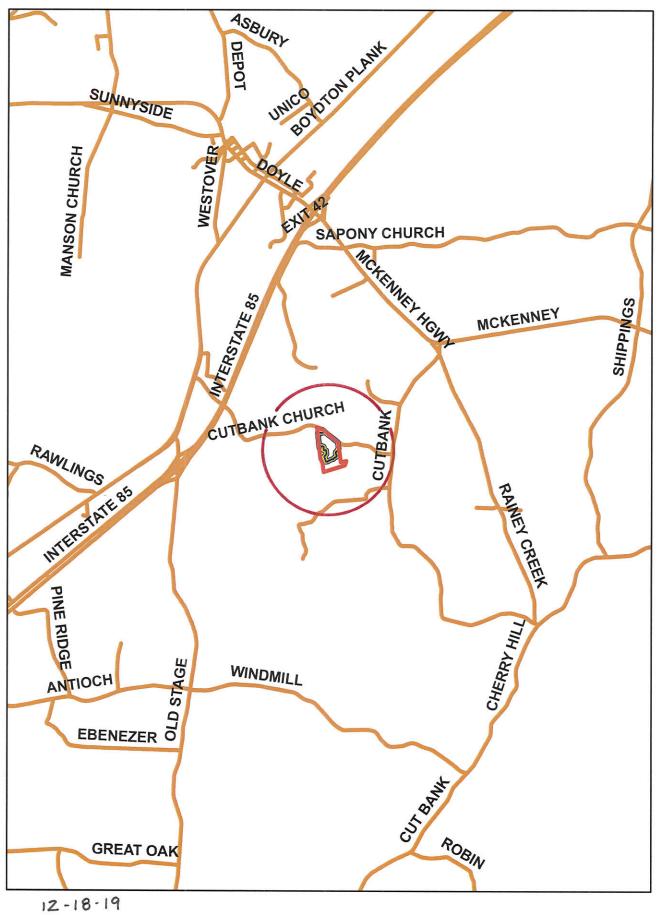
NA



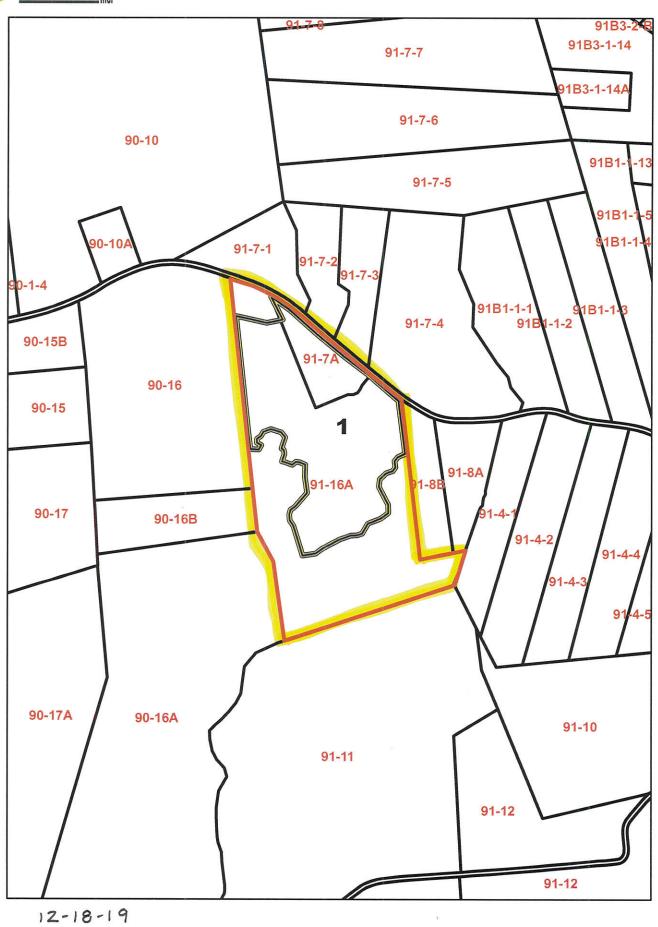














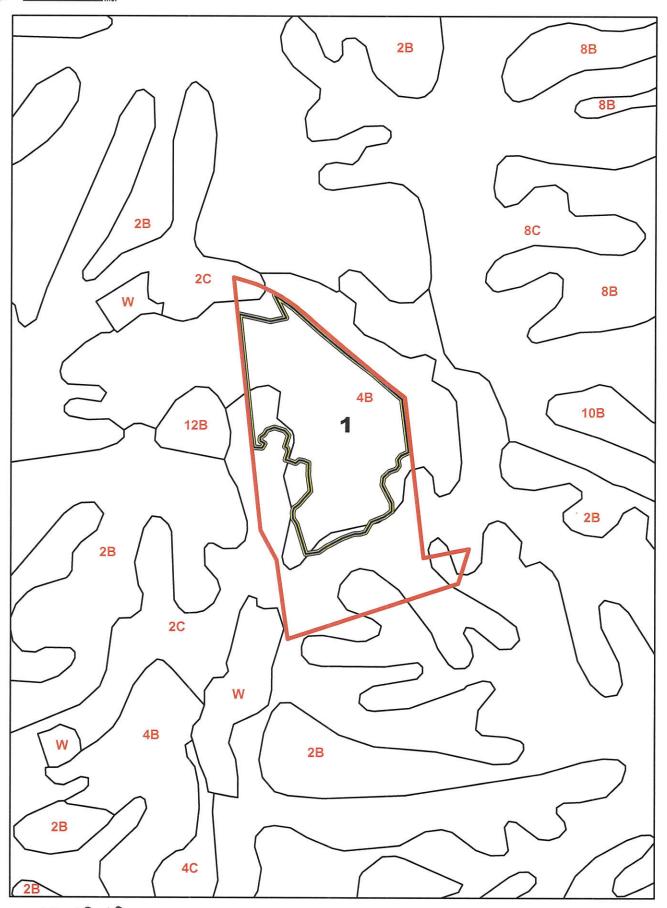
Tax Map

ADJOINING LANDOWNERS

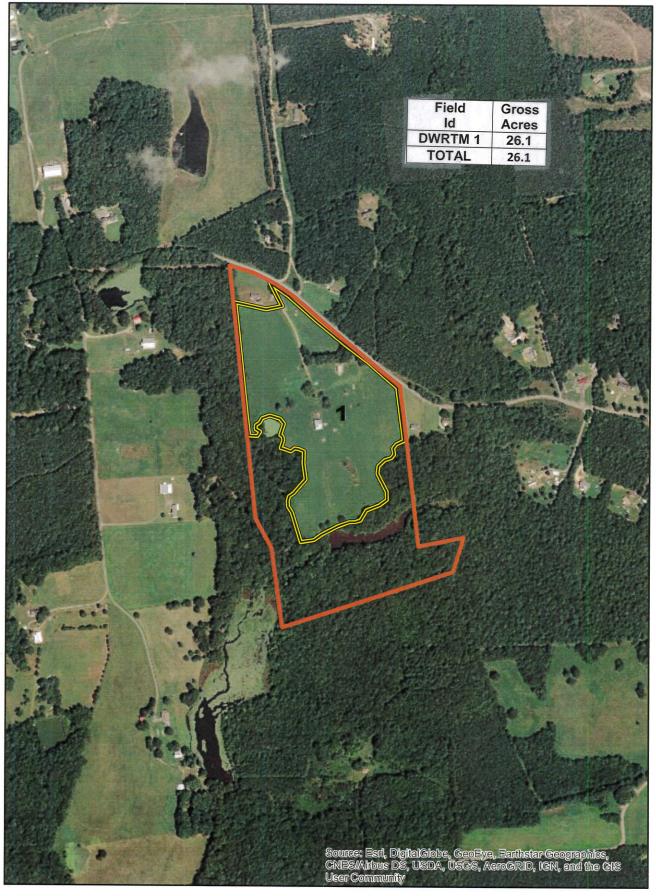
ROBERT T. MAASS

DINWIDDIE COUNTY

Tax Map	Parcel #	Owner Name(s)
90	16	Randy A. and Mary A. Abernathy
	16A	David and Gail Dussere
	16B	Royce A. and Wendy L. Jones
91	8A	Eastside Properties Inc.
	8B	Phillip D. and Vickie L. Bowden
	11	Peter W. Janzen
91-4	1	Warren R. Marshall
91-7	1 2	McKenney Associates LLC c/o RJ Toomey McKenney Associates LLC c/o RJ Toomey
	2 3	Tyler W. Gross or Amber Murray
	4	Lexia A. and Shari L. Watson











Dinwiddie County, Virginia

Tract 5233

Farm 2265

2019 Program Year

Map Created June 20, 2019

Common Land Unit

Non-Cropland Cropland

rcl_l_va053

Tract Boundary

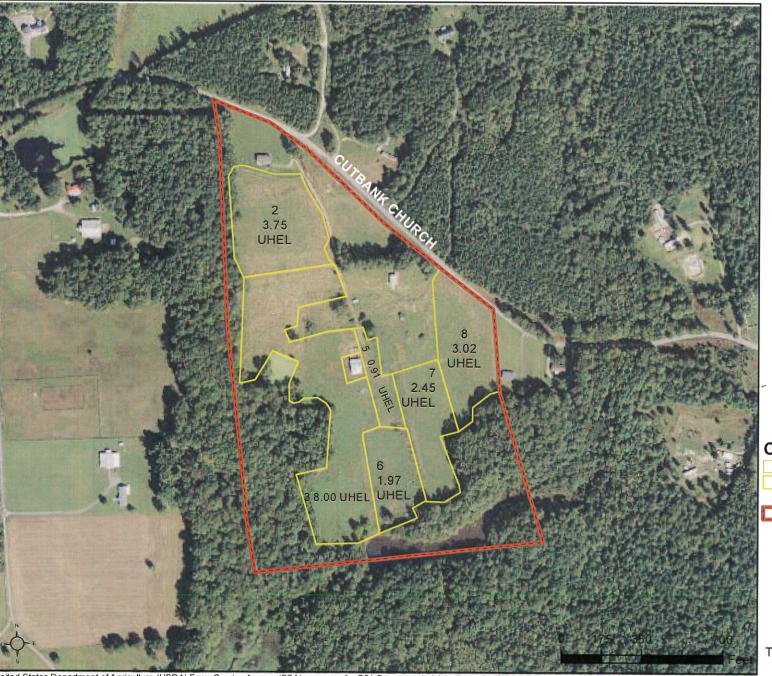
Wetland Determination Identifiers

Restricted Use

▽ Limited

Exempt from Conservation Compliance Provisions

Tract Cropland Total: 20.10 acres



United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Legend For Site Plan

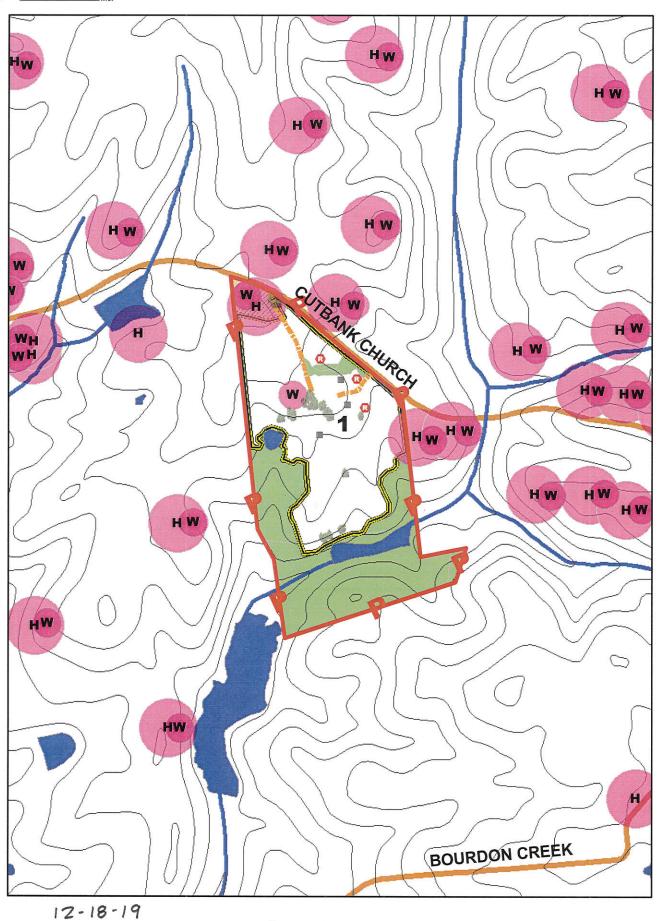
Symbol	Feature	Minimum Setback
H/W	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
W S	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
ш	Wet Spot	
	Trees and Woods	
	Private Drive	
R	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
Ξ	Severely Eroded Spot	18 Inch minimum depth of soil
S	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
P P P	Property Line	100 feet from property line *
SLS	Slope	15% maximum
	Hashed out Area	No application

^{*}Buffer can be reduced or waived upon written consent from landowner.



Robert T. Maass

DWRTM





Site Map

1 in = 660 feet



